

From owner-qrp-l@netcom.com Sat Mar 18 13:04:32 1995
Date: Sat, 18 Mar 95 15:57 GMT
From: oddjob@cix.compulink.co.uk (Stephen Walters)
Subject: 6L6 valves and nuvistor questions
Message-Id: <memo.126533@cix.compulink.co.uk>

Dear all,

Does anybody know what the lowest HT voltage I can run 6L6 valves on? I do'nt like playing with high voltages.....! I want to build a portable qrp valve tx and use a nicad stack as the supplle for HT and LT voltages.

Nuvistors

I have some of the most popular nuvistor ever made, the type 6CW4. There have many articles written on these devices, mainly in the 1960s. The Radio Society of Great Britain handbooks use to have articles on projects using these tubes (But I have'nt found any).

I would like to use them to build a QRP ***HF*** TX and a DC RX too if possible.

Typical use for the 6CW4 nuvistor would be as a VHF radio or television preamplifier. It is a high-mu triode, filament voltage of 6.3 v.a.c. @ 0.135 amps. Maximum plate voltage is 135 volts d.c.
I also need some additional sockets, as I only have one or two.

from a Sylvania tube manual:

heater: 6.3v +/- 10%, 130ma. Design max. heater-cathode voltage (total dc + peak ac): +/- 100v. Direct interelectrode capacitances (shielded):
Cg-p 0.92pf; input:Cg-(h+k+shell) 4.3pf;
output:Cp-(h+k+shell) 1.8pf; Ch-k 1.3pf; Cp-k 0.18pf.
h=heater,k=cathode,g=grid,p=plate.
Ratings--design max. values:
Plate supply voltage: 300v. max.
Plate voltage: 135v. max.
Plate dissipation: 1.0 W. max.
DC cathode current: 15ma. max.
Negative grid voltage: 55v. max.
Grid circuit resistance(self bias): 2.2Megohms max.
(fixed bias): 0.5Megohms max.

Characteristics and typ. operation-- Class A1 amplifier:

Plate voltage:	70	110 v.
Grid resistor:	47k	--- ohms
Cathode resistor:	---	130 ohms
Plate current:	7.2	7 ma.

Transconductance:	12,000	9,800 micromhos
Amplification factor:	68	65
Plate resistance(approx.)	5,440	6,600 ohms
Ec (grid voltage) for		
Ib(plate current)=10microamps (approx.)		
	---	-4 v.

Application: The Sylvania type 6cw4 is a nuvistor high mu triode intended for use as a grounded cathode, neutralized R-F amplifier in VHF tuners. Type 6cw4 features a noise factor improvement of 2 to 4 db over current tuner tubes.

oddjob@cix.computlink.co.uk

From owner-qrp-l@netcom.com Sat Mar 18 21:10:36 1995
Date: Sat, 18 Mar 1995 17:30:30 -0800
From: faunt@netcom.com (Doug Faunt N6TQS 510-655-8604)
Message-Id: <199503190130.RAA27835@netcom3.netcom.com>
Subject: Back issues of -72-, the newsletter of the NE QRP Club?

Does anyone on this list have information about availability of these?
thanks, and 73, doug

From owner-qrp-l@netcom.com Sun Mar 19 00:03:55 1995
From: Byron8LCZ@aol.com
Date: Sat, 18 Mar 1995 21:31:46 -0500
Message-Id: <950318213145_53785753@aol.com>
Subject: Digital Signal Processors DSP

The Radio Shack DSP filter is just that, a filter. The JPS or Timewave 599+ DSP's are alot more. They have a peak function, the software in the DSP reconizes the signal, amplifies it, then surpresses the noise, thereby increasing the signal to noise ratio by a substantial amount. The Timewave also has filters from 25 hz to 1.6 khz.

the Radio Shack filter is around 70 dollars, the JPS is abt 249 and the Timewave is 299.00 It depends on what you're looking for. A couple of my QRP buddies (WB8E & AA8LZ) have the radio shack filter and like it.

You'll find the current draw can also be heavy, as much as 500 ma. at 12 volts (JPS). I use the JPS NRF-7 all the time, i've found i depend on the constant noise reduction, especially on 80 and 40 meters. But its not a cure-all. i still have alot of noise to content with. the 80/40 meter noise must be a combination of atmospheric, man-made and band noise. No one device seems to

help alot. Using a full wave closed loop antenna seems to do more than any other single method to reduce. My typical 80m noise level is s-5 and my 40m noise is s-3 or greater. I live a couple of miles from Detroit and have alot of noise round the clock. If i could figure out how to get a 80m loop on my small property, i would do it.

Another option is a SCAF filter, Oak Hills Research has them for abt 60 bucks. They work extremely well.

Some DSP's are designed for the SSB op, like the JPS NRF-10 which includes a automatic notch filter that handles up to 4 hetrodynes. The NRF-7 is designed for the QSK CW op, it has fast recovery, two cw filters and a peak function, but unfortunetly you cant use the cw filter and the peak at the same time.

The Timewave gives you more options (filters, peak, notch,agc) and lets you use them together but the peak function is harder to set and needs to be adjusted often.

A discussion on DSP is directly related to QRP and ham radio, and i'll bet there are at least a hundred hams out there, that want to hear about it or talk about it. DSP is part of the future of ham radio, it will be built into more and more rigs in the next few years. Its already in the Kenwood TS 950, The Ten Tec Omni-6 and probably other rigs.

On another subject:

Too many people on this list are afraid to say something for fear of offending the "self appointed QRP-L police". If you are paying for a Internet connection, you have as much right to speak as anyone else. If you let these guys silence you, we'll all miss the opportunity to learn more about our favorite hobby, QRP. Ask questions, make comments, thats what this list is all about. If the "police" dont like it, too bad. Some of the "very best" comments I've seen on this list, come to me in private e-mail, because the authors dont want to offend the police. What a shame. Just think of all the really interesting posts that everyone else has missed.

72, Byron WA8LCZ

From owner-qrp-l@netcom.com Sun Mar 19 01:56:18 1995
From: NYOUNG@nova.wright.edu
Date: Sat, 18 Mar 1995 22:51:39 -0400 (EDT)
Subject: Life's tough. But then there's rhetoric.
Message-Id: <01HOAQJN83EG8WYRB0@nova.wright.edu>

Ok, I'm sitting here trying to figure out why "they" always say that business writing is more formal and yet my wife can say things like "we'll update you" and "just next door" and then get angry 'cause I don't

understand that she's written a business memo and had wanted to be chatty. Hmmm. Just how do you update people? Do you peel the little cover off and expose 'em to UV? And how much more next door is "just next door"? See, these are puzzling questions.

Like this: Preston sends the list of QRP whackoes who are going to be at Dayton. He's got himself listed twice. Does he have bilocation powers? Or does he live in a diplexer? And just how much different is "taking up a challenge" from, say, taking up the kitchen tile? These things are important. Even if I can't figure out why, after spending twelve hours reading freshman composition papers, they're still important.

Like this: You can call CQ and you can call CQ QRP and you can sign your call or you can sign your call and add /QRP or just QRP. How much more QRP are you if you don't tell anyone? I mean, after all, once "they" find out that you're running low power, the batteries in "their" hearing aids (as opposed to AIDS) go weak and they have to get ready for dialysis or something. Geezh. Sometimes I really think that "or" isn't a conjunction.

Or maybe it's just that all those QRO types are just in need of being updated so that they'll see how QRP or not, we're not always going to sound like we're just next door. But that's part of taking up the challenge. Don'tcha think?

73
Nils
WB8IJN &c

From owner-qrp-l@netcom.com Sat Mar 18 21:09:46 1995
From: David Johnson <djohnson@acpub.duke.edu>
Message-Id: <199503182206.RAA19006@bio3.acpub.duke.edu>
Subject: MFJ249/209 at lower freq?
Date: Sat, 18 Mar 1995 17:06:14 -0500 (EST)

Hey all! I wonder if anyone has done any mods to an MFJ SWR Analyzer? I have the 209 (I think I have the number right, but it's not in front of me). It's the one without the digital freq readout, & covers up thru vhf! It works great, but somewhere I saw someone had a mod to allow one of these to be used down into the vlf range, like down to 100 kHz! Can anyone help?

QRP stuff: I tried to pull someone out on Thursday night, with my colorburst rig, but no good results. Will try more, though! Seems 160m is getting a bit noisier, but 80 is fine as regards QRN levels. So get those peanut whistles onto 3579.5 !

72,

Dave

--

David W. Johnson	Power is no substitute for skill
Amateur Extra WA4NID	QRP ARCI 6546
email: djohnson@acpub.duke.edu	G-QRP 4864
packet WA4NID@KB4WGA.NC.USA.NA	NorCal 355

From owner-qrp-l@netcom.com Sun Mar 19 04:01:29 1995
Date: Sat, 18 Mar 1995 22:00:17 -0800 (PST)
From: H Smith <hbs@crl.com>
Subject: Re: qrp-l police
Message-Id: <Pine.SUN.3.91.950318215425.11434A-1000000@crl3.crl.com>

On Sat, 18 Mar 1995 Byron8LCZ@aol.com wrote:

>
> interesting part about DSP filters deleted.....
>
> On another subject:
> Too many people on this list are afraid to say something for fear of
> offending the "self appointed QRP-L police". If you are paying for a Internet
> connection, you have as much right to speak as anyone else. If you let these
> guys silence you, we'll all miss the opportunity to learn more about our
> favorite hobby, QRP. Ask questions, make comments, thats what this list is
> all about. If the "police" dont like it, too bad. Some of the "very best"
> comments I've seen on this list, come to me in private e-mail, because the
> authors dont want to offend the police. What a shame. Just think of all the
> really interesting posts that everyone else has missed.
>
> 72, Byron WA8LCZ
>

Byron,

Now that you have brought it up, would you care to elaborate (in public) on what you mean by "qrp-l police"?

I am sure that I am not the only one interested in knowing about this.

Smitty, NA5K

Henry Smith (hbs@crl.com)

From owner-qrp-l@netcom.com Sat Mar 18 11:50:20 1995
Date: Sat, 18 Mar 1995 08:45:36 -0500 (EST)
From: James Lyons <jlyons@CAM.ORG>
Subject: Re: QRPP in Canada?
Message-Id: <Pine.SOL.3.91.950318084501.1367A-100000@ocean>

Dave,

I received mine several weeks ago.

Jim, VE2KN

On Fri, 17 Mar 1995, Dave Burniston wrote:

> Any Canadians received their QRPP yet? Still no sign of mine.
>
>
> Dave
> VE3LFO
>
>

From owner-qrp-l@netcom.com Sun Mar 19 03:21:36 1995
Date: Sat, 18 Mar 95 23:16:18 PST
Message-Id: <9503190716.AB05164@altair.csustan.edu>
From: dh@altair.csustan.edu (Doug Hendricks)
Subject: QSO with DR. Rick

I was in the nightly SSB qrp roundtable with Derry, VE7QK, Joe, VE7TX, Dave, W6EMD, Vern W6MMA, Grant VE7PTW, and Bob VE7XDY, when who should show up but VE6GK, Dr. Rick from Calgary. Rick is just drilling the holes in his cabinet on his Epiphyte, and we are anxious to hear it on the air. Rick had a good signal in California tonight, and it was neat to get to talk to him over the air. We have exchanged several pieces of email, and he has written an article for QRPP (Ham Radio: Hazardous to your Health? Mar. 95).

Vern worked Puerto Rico with his Epiphyte yesterday, and we both painted our cabinets for the Cascade today. I painted mine with Krylon Semi-Flat Black for the case and Krylon Ivory for the panels. Used Eric Swartz's idea of the laser printed clear type 320 Repro Film to do the labeling. It was a snap. Printed up the design on the computer, and then printed it out with the laser printer. It made a neat label, complete with the NorCal logo on the front.

I did a test of the receiver on the Cascade tonight. Nothing scientific, just tuned in a qso and decided to see if there was drift in the VFO. I listened to a 3 way qso with one station in Detroit, one in Atlanta, and one near Knoxville, TN. They were on for over 2 hours. I never touched the dial, and they were perfect copy for the whole time. Also, I am working on the manual for the Cascade project this weekend.

Don't forget the QRP to the Field contest in two weeks. It is on April Fool's day (don't you know that my wife will have a comment about that one). I will be with Vern Wright, and we have a killer antenna planned. Won't let it out, but we will be heard. Vern and I will hopefully have our Cascades finished and have them on the air. The next day is a NorCal meeting, so there will be plenty of stories to exchange.
72, Doug, KI6DS

From owner-qrp-l@netcom.com Sat Mar 18 14:05:08 1995
From: BOBME@LAGUNA.EPCC.EDU
Date: Sat, 18 Mar 1995 08:02:17 -0600 (MDT)
Subject: Re: Removing Solder Flux
Message-Id: <Pine.3.89.9503180700.A539052907-01000000@LAGUNA.EPCC.EDU>

Why not use a solder that leaves no flux residue? MULTICORE SOLDERS makes a line of 63/37 solder that leaves no residue. The trade name is CRYSTAL. Call MULTICORE at 214-238-1224 for more details

From owner-qrp-l@netcom.com Sat Mar 18 19:46:56 1995
Date: Sat, 18 Mar 1995 13:46:57 -48000
From: "David D. Meacham" <ddm@datatamers.com>
Subject: Re: RFC value...HOW??
Message-Id: <Pine.3.89.9503181340.A2766-01000000@dt1.datatamers.com>

John,

Some considerations:

- 1) The inductive reactance at the lowest operating frequency should be 5 to 10 times the circuit impedance to minimize circuit loading and minimize RF current in the choke.
- 2) Chokes have internal resonances. The lowest resonance must be above the highest operating frequency.
- 3) Sometimes the choke must be D-Q'ed with a shunt resistor to avoid ringing. $Q=1$ at the frequency where $R=XL$.
- 4) You are correct, wire size determines current-carrying rating. Consider DC AND RF currents. They add as the square root of the sum

of the squares.

72, Dave, W6EMD.

From owner-qrp-l@netcom.com Sat Mar 18 10:00:13 1995
From: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org (Mike Czuhajewski)
Subject: Re: RS12/13 ops (long) was:AK QS0...
Date: Sat, 18 Mar 95 07:26:48 EST5EDT
Message-Id: <1995Mar18.072648.1181@wb3ffv.ampr.org>

Thanks for the posting on RS-12--I haven't done it in a few years, but working the HF Russian satellite with QRP was a blast! If anyone out there is interested, I can e-mail them a copy of my two-part article on it that was in the QRP Quarterly a couple years back. I will not post it to the list since it is quite long. Ask me to e-mail file MCQSAT.
73 and Queue Our Pea DE WA8MCQ

--

Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org
E-Mail: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

From owner-qrp-l@netcom.com Sat Mar 18 11:18:29 1995
Date: Sat, 18 Mar 1995 08:46:41 -0500 (EST)
From: James Lyons <jlyons@CAM.ORG>
Subject: Re: signing /QRP
Message-Id: <Pine.SOL.3.91.950318084619.1367B-100000@ocean>

My sentiments entirely!

Jim, VE2KN

On Fri, 17 Mar 1995 N5EM@aol.com wrote:

> Well, my experience with signing QRP is different. I have found that in
> listening to the calling frequency, I am interested in working fellow QRP
> stations. No real prejudice here, I just an monitoring the calling frequency
> to work QRPers. If I wanted to work anyone, I'd not pick the national 40
> meter tune-up/errant amtor frequency.

>

> So, I appreciate it when a fellow QRPer lets me know that he/she is qrp by
> appending QRP (Note: NOT /QRP) to the call sign. When I call CQ, its usually
> in the format, "CQ CQ CQ de N5EM N5EM N5EM QRP". It was discussed a number
> of years ago that signing stroke "/" anything implies something FCC related.
> Not to labor this point, though. I doubt anyone ever got a pink slip (they
> really are pink, but that's another story) for signing /QRP.

>

> If you like the bit of deception of waiting for the 599 before telling about
> your station, go ahead. Just realize that if the band is good, and you don't
> say you are QRP, I may hear you and not call you because your signal is too
> good and I'm looking for a nice 2 way QRP qso. I am frequently called by QRO
> stations who are curious about the QRP add on. I am always delighted to chat
> with a QRO station, I just don't go out looking for them on the QRP calling
> frequency.

>

> So, the moral of the story is, do whatever you like. But, don't hesitate to
> sign that you are QRP. You never know. I might be lurking just waiting for
> you to stop by.

>

> And, not that this word is so definitive that I won't respond to your reply,
> I'll be skiing in Utah next week so I will not be checking mail. Some things
> take precedence to ham radio (for at least a while!)

>

> 72/73

>

> Ed Manuel - N5EM

> n5em@aol.com

> Houston, Texas

>

> QRP - Its a state of mind, not just a power level.

>

> QRP ARCI #4914, G-QRP #1243, NORCAL #498

> (And, waiting on my CQC number!)

>

>

>

From owner-qrp-1@netcom.com Sat Mar 18 14:17:52 1995

Date: Sat, 18 Mar 1995 10:08:35 -0500 (EST)

From: privalko <privalko@Oakland.edu>

Subject: Re: signing /QRP

Message-Id: <Pine.3.89.9503181055.A2422-0100000@saturn.acs.oakland.edu>

On Sat, 18 Mar 1995, Jerry Sy wrote:

[SNIP : comment about nobody answering his QRP CQs]

> ...But I have 95% success if I answer a CQ.

In that case, you, sir, are running WAY too much power

I think my average is 20% if that. :-)

73 =paul= wb8zjl

From owner-qrp-l@netcom.com Sun Mar 19 00:35:14 1995
From: rohrwerk@holonet.net
Date: Sat, 18 Mar 1995 18:58:23 -0800
Message-Id: <199503190258.SAA08648@holonet.net>
Subject: Re: signing /QRP

A personal approach to this: I don't sign /qrp when tuning about the band for basic ragchews. Either in answering CQ's or making them myself, I pretty much don't call attention to the QRP until after the RST's are exchanged. For random QSO's on 40 and 20 meters, with basically good conditions (a number of strong signals audible on the band) I find my results are strikingly good if I answer a strong signal. I just had somebody on 20 meters in the morning say he nearly fell out of his chair when I told him 5 watts -- he was running about 750W into a 4 element beam!

However, near the qrp freqs, I feel it as kind of a bonding thing; when I hear that "/qrp" I perk up my ears and know that the other will probably also listen hard down to the noise level.

Just my approach.

: John Seboldt	rohrwerk@holonet.net	/	I am Bach of Borg...
: Amateur radio	K0JD...	/	your style will be
: Church of the	Annunciation,	/	assimilated.
: Minneapolis		/	

-> Alice4Mac 2.3 E QWK Eval:05Mar94

From owner-qrp-l@netcom.com Sun Mar 19 00:09:40 1995
Message-Id: <199503190310.AA12492@marcel.gamekeeper.bellcore.com>
Subject: So Long
Date: Sat, 18 Mar 95 22:11:51 EST
From: "Luis R. Anaya" <papo@gamekeeper.bellcore.com>

I'll be leaving the list temporarily until I get reassigned to a new account. This is because I am changing projects.

I also want to tell you that passed General today, trying to get the hands on the Fox forced me to get the darned test. :) I'll be back shortly.

'72

--

Luis Roberto Anaya-Rivera papo@donuts0.bellcore.com

A True PL/1 Hacker
Bellcore, NJ

papo@briscas.gamekeeper.bellcore.com
Ham: N2ZXE/AG

From owner-qrp-1@netcom.com Sat Mar 18 11:54:53 1995
From: roy.gregson@usfamily.wa.com (Roy Gregson)
Subject: subscribe
Date: Fri, 17 Mar 1995 22:36:51 GMT
Message-Id: <950317180006874@usfamily.wa.com>

subscribe qrp-1@netcom.com